**Additional Practice Problems - Unit 6 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**\*\*\* Complete the following questions on a piece of notebook paper. You will need to show the completed problems to me before I allow you to retake the quiz!**

**Quiz #1 – Balancing Equations**

1. \_\_\_\_Cr(s) + \_\_\_\_SnCl4(aq) 🡪 \_\_\_\_Sn(s) + \_\_\_\_CrCl2(aq)

2. \_\_\_\_C6H14(l) + \_\_\_\_O2(g) 🡪 \_\_\_\_H2O(g) + \_\_\_\_CO2(g)

3. \_\_\_\_Fe(s) + \_\_\_\_O2(g) 🡪 \_\_\_\_Fe2O3(s)

4. \_\_\_\_RbCl(aq) + \_\_\_\_MgSO4(aq) 🡪 \_\_\_\_Rb2SO4(aq) + \_\_\_\_MgCl2(aq)

**Quiz #2 – Balancing & Writing Reactions**

1. 4 Cr(s) + 3 O2(g) 🡪 2Cr2O3(s)
   1. In the above equation, what numbers are coefficients?
   2. What numbers are subscripts?
   3. Which substances are the reactants?
   4. Which substances are the products?
   5. Which substance is a diatomic element?
2. Write a balanced chemical equation for each of the following:
   1. A solution of hydrogen peroxide (H2O2) decomposes into water vapor and oxygen gas.
   2. A solution of lead (II) nitrate reacts with a solution of sodium hydroxide to form a solution of sodium nitrate and lead (II) hydroxide precipitate.

**Quiz #3 – Identifying Reaction Types**

1. Write the generic equation for each of the 5 reaction types. (The 1st one is done for you.)
   1. Synthesis: A + B 🡪 AB
   2. Decomposition:
   3. Single Replacement:
   4. Double Replacement:
   5. Combustion:
2. Write a balanced equation for the combustion of C6H14.
3. Write a balanced equation for the decomposition of sodium bromide.
4. Write a balanced equation for the synthesis reaction that produces iron(II) oxide.
5. Complete and balance the following single and double replacement reactions:
   1. Cl2 + LiBr 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. NaOH + Rb2O 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Quiz #4 – Predicting Products**

1. Complete and balance the following reactions:
   1. Synthesis: \_\_\_\_Ca + \_\_\_\_O2 🡪 \_\_\_\_\_\_\_\_
   2. Double Displacement: \_\_\_\_Mg(OH)2 + \_\_\_\_KCl 🡪 \_\_\_\_\_\_\_\_
   3. Single Displacement: \_\_\_\_Ag + \_\_\_\_CuCl2 🡪 \_\_\_\_\_\_\_\_
   4. Combustion: \_\_\_\_CH4 + \_\_\_\_O2 🡪 \_\_\_\_\_\_\_\_
   5. Decomposition: \_\_\_\_B2O3 🡪 \_\_\_\_\_\_\_\_
2. Write a balanced equation for the following reaction including states of matter.
   1. Aqueous solutions of potassium iodide and silver nitrate react to form a precipitate.